

**Practice B**

For use with pages 93–98

**Find the product.**

- |                              |                                 |                                    |
|------------------------------|---------------------------------|------------------------------------|
| 1. $(-8)(6)$                 | 2. $(9)(-7)$                    | 3. $(-50)(-12)$                    |
| 4. $(6)(-1.1)$               | 5. $(-7)(-\frac{1}{3})$         | 6. $(-12)(\frac{3}{4})$            |
| 7. $(4)(2)(-3)$              | 8. $(-5)(14)(-3)$               | 9. $ (-4)^3 $                      |
| 10. $(-6)(-8)(-\frac{3}{4})$ | 11. $(2)(-9)(-1)(-\frac{2}{3})$ | 12. $(-12)(-3)(-7)(-\frac{5}{21})$ |

**Simplify the variable expression.**

- |                          |                                      |                               |
|--------------------------|--------------------------------------|-------------------------------|
| 13. $(14)(-x)$           | 14. $(-2)(-y)(-y)$                   | 15. $(-4)(-x)(-x)(-x)$        |
| 16. $6(a)(-a)(-a)$       | 17. $-(-y)^3$                        | 18. $(-3)^3(-t)^2$            |
| 19. $-(-y)^2(y)^2$       | 20. $-7(-m)^3(-m)^2$                 | 21. $ (3)(z)^2(-z) $          |
| 22. $(\frac{1}{5})(-5x)$ | 23. $(-\frac{6}{7})(-\frac{14}{3}x)$ | 24. $(-\frac{3}{4})(-k)(-8k)$ |

**Evaluate the expression.**

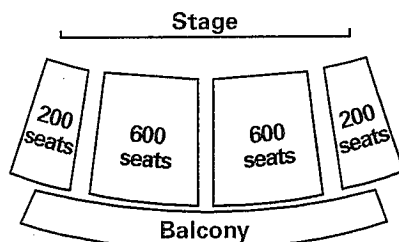
- |                                 |                                    |                                 |
|---------------------------------|------------------------------------|---------------------------------|
| 25. $-4x$ when $x = 11$         | 26. $x^3 - 3$ when $x = -2$        | 27. $2y^3 - 3y$ when $y = -3$   |
| 28. $-x^3 + x^2$ when $x = 5$   | 29. $3.5m + m^2$ when $m = -5$     | 30. $ -2(y - 5) $ when $y = 8$  |
| 31. $-4( t - 8 )$ when $t = -3$ | 32. $-3x^2 - 5x + 7$ when $x = -2$ | 33. $5x^3 - (-6x)$ when $x = 2$ |

- 34. Bike Tire** There is a slow leak in your bike tire. It is losing air at a rate of 2.5 pounds per square inch per day. Let  $x$  represent the amount of air in the tire now. Write an expression for the amount of air in the tire after 3 days. If the amount of air in the tire is now 75 pounds per square inch, find the amount of air in the tire after 3 days.

- 36. Auditorium Capacity** The seating in an auditorium is divided into five sections. The total number of seats is 2000. The two center sections each have 600 seats. The outside sections each have 200 seats. Which of the following correctly describes the number of seats available in the balcony?

- a.  $2(600) + 2(200) - 2000$   
 b.  $2000 - [2(600) + 2(200)]$

How many seats are in the balcony?



- 35. Loss Leaders** To promote sales, a grocery store advertises cantaloupes for \$0.99 each. The store loses \$0.19 on each cantaloupe it sells. Let  $C$  represent the number of cantaloupes the store sells. Write an expression for the amount of money the store loses. How much will the store lose if it sells 2862 cantaloupes?

- 37. Cheerleading** During a cheer at half-time, the cheerleaders form a pyramid. Each level of the pyramid has one less person than the level below. The bottom level has 3 people. Which of the following correctly describes the total number of cheerleaders in the pyramid?

- a.  $3 + (3 - 1) + (3 - 2(1))$   
 b.  $3 + (3 - 1) + 2(3 - 1)$

How many cheerleaders are in the pyramid?